Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 22 with the following rewritten paragraph:

Furthermore, it is particularly advantageous that, in the method according to the invention, the weighting factors for the weighted superimposition of the coil signals ~~according to claim 2~~ on the individual receiving channels can be calculated such that the image noise in predeterminable image points or image areas of the reconstructed MR image is minimal. For this purpose, the knowledge of the theoretical basis of SENSE imaging according to the above-quoted article by Pruessmann *et al* is used, in order, for example, to calculate ~~according to claim 3,~~ the individual weighting factors according to the spatial sensitivity profiles of the individual coil elements and their noise behavior. For this it is only necessary for the spatial sensitivity profiles of the individual coil elements of the HF coil arrangement used according to the invention and the self noise and the cross-correlated noise of the individual coil elements to be precisely determined once. Thereafter, the weighting factors can, as it were, be automatically calculated by pre-selection of image areas, in which a minimal image noise is desired such that optimal SENSE imaging with a maximum reduction factor, i.e. with a minimum image recording time, is ensured.

Please replace the paragraph beginning at page 5, line 3 with the following rewritten paragraph:

As already stated, effective spatial sensitivity profiles are in each case associated with the individual receiving channels in the parallel MR imaging method according to the invention. These effective spatial sensitivity profiles can advantageously be calculated ~~according to claim 4~~ with low expenditure from the precisely known spatial sensitivity profiles of the individual coil elements of the HF coil arrangement, and more precisely, according to the previously calculated weighting factors.

Please replace the paragraph beginning at page 5, line 9 with the following rewritten paragraph:

AN MR device according to <u>an embodiment of the invention</u>~~claims 5 to 7~~ is suitable for carrying out the MR method according to the invention. The above-described method can be implemented on a device of this type by means of a suitable program controller of the control mechanism and/or the reconstruction and visualization mechanism.

Please replace the paragraph beginning at page 5, line 13 with the following rewritten paragraph:

The method according to the invention can be made available to the users of MR devices of this type ~~according to claim 8~~ in the form of a corresponding computer program. A computer program for optimizing the use according to the invention of an HF coil arrangement for parallel MR imaging consisting of a plurality of coil elements is the subject of <u>alternate embodiments of the invention</u>~~claims 9 and 10~~. Computer programs of this type can be stored on suitable data media, such as for example CD-ROM or diskette, or they can be downloaded via the Internet for example onto the control mechanism of an MR device.